## DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

## LAKE TROPHIC DATA

## MORPHOMETRIC:

Lake: CATAMOUNT PO	ID	Lake Area (ha):	7.28
Town: ALLENS	TOWN	Maximum depth (m):	3.0
County: Merri		Mean depth (m):	1.0
River Basin: Merri		Volume (m³):	73000
Latitude: 43°09		Relative depth:	1.0
Longitude: 71°23		Shore configuration:	2.77
Elevation (ft):		Areal water load (m/yr):	281.6
Shore length (m):		Flushing rate $(yr^{-1})$ :	271.0
Watershed area (ha)		P retention coeff.:	0.04
% watershed ponded:	< 0.10	Lake type: arti	ficial

BIOLOGICAL:	25 January 1993	6 August 1992
DOM. PHYTOPLANKTON (% TOTAL) #1	MICROCYSTIS>99%	CHRYSOSPHAERELLA 20%
#2		FILAM. GREEN SPP. 20%
#3		FILAM. BL-GR SPP. 15%
PHYTOPLANKTON ABUNDANCE (cells/mL)		300
CHLOROPHYLL-A (µg/L)		6.16
DOM. ZOOPLANKTON (% TOTAL) #1	KERATELLA>99%	NAUPLIUS LARVA 36%
#2		CYCLOPOID COPEPODS 16%
#3		BOSMINA 13%
ROTIFERS/LITER	23	52
MICROCRUSTACEA/LITER	<1	200
ZOOPLANKTON ABUNDANCE (#/L)	23	301
VASCULAR PLANT ABUNDANCE		Common
SECCHI DISK TRANSPARENCY (m)		1.2
BOTTOM DISSOLVED OXYGEN (mg/L)	13.9	0.4
BACTERIA (E. coli, #/100 ml) #1		7
#2		2
#3		

### SUMMER THERMAL STRATIFICATION:

# weakly stratified

Depth of thermocline (m): None Hypolimnion volume  $(m^3)$ : None Anoxic volume  $(m^3)$ : 6500

CHEMICAL:		Lake: CATAMOUNT POND Town: ALLENSTOWN			
	25 Janua	ary 1993	. 6 2	August 199	92
DEPTH (m)	1.0		1.0		2.0
pH (units)	5.5		6.4		6.2
A.N.C. (Alkalinity)	0.5		3.5		4.2
NITRATE NITROGEN	0.05		0.04		0.04
TOTAL KJELDAHL NITROGEN	0.15		0.28		0.41
TOTAL PHOSPHORUS	0.080		0.031		0.050
CONDUCTIVITY (µmhos/cm)	36.8		36.2		36.1
APPARENT COLOR (cpu)	55		120		120
MAGNESIUM			0.48		
CALCIUM			1.9		
SODIUM			3.7		
POTASSIUM			0.45		
CHLORIDE	5		6		5
SULFATE	5		3		3
TN : TP	3		10		9
CALCITE SATURATION INDEX			4.1		

All results in mg/L unless indicated otherwise

## TROPHIC CLASSIFICATION: 1992

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	4	3	1	8	Meso.

#### **COMMENTS:**

- The pond is located in Bear Brook State Park. The park swimming beach is located on this pond with a roped off swimming area.
- 2. Also known as Bear Brook Pond.
- 3. Cryptomonas (40%) and Mallomonas (15%) were the dominant genera of wholewater phytoplankton.

#### FIELD DATA SHEET

LAKE: CATAMOUNT POND

DATE: 08/06/92

TOWN: ALLENSTOWN

WEATHER: SUNNY, HOT, DRY

	EPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	19.0	8.3	89 %
	1.0	16.0	7.6	76 %
	2.0	13.2	0.2	2 %
	2.5	12.5	0.4	4 %
				30.500
			13.4444	
·				

SECCHI DISK (m): 1.2 COMMENTS:

BOTTOM DEPTH (m): 2.8

TIME: 1155

\*Dissolved oxygen values are in mg/L

### AQUATIC PLANT SURVEY

LAK	E: CATAMOUNT POND	TOWN: ALLENSTOWN	DATE: 08/06/92
(ey	ABUNDANCE		
у	GENERIC	COMMON	ADONDANCE
A	Sagittaria	Arrowhead	Scat/Common
บ	Utricularia	Bladderwort	Common
S	Sparganium	Bur reed	Scattered
W	Potamogeton	Pondweed	Common
G	Gramineae	Grass family	Scattered
d	Dulichium arundinaceum	Three-way sedge	Sparse
е	Eleocharis	Spike rush	Sparse
Х		Sterile thread-like leaf	Common
Y	Nuphar	Yellow water lily	Sparse
		4.00	

#### OVERALL ABUNDANCE: Common

## **GENERAL OBSERVATIONS:**

- 1. Numerous small marshy islands located at the two inlet ends of the pond.
- 2. Bladderwort was common over the visible bottom at the southern end of the pond amongst the islands; not depicted on the plant map.